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ABSTRACT

A comparative analysis of theoretical statements and school setting practices in physical education classes revealed gaps between theory and practice. Data were gathered through observation of 123 elementary and secondary school classes, and questionnaires submitted to teachers, administrators, and students. Problems identified as directly or indirectly influencing curriculum, teacher effectiveness, teaching behaviors, and student outcomes included: time and requirement constraints; socioeconomic conditions; lack of administrative and community support; availability of facilities and equipment; teaching load; inadequate preparation time; teacher-coach role conflict; rewards, satisfaction, and reinforcement for teaching; interpersonal relationships; the teacher's image; teacher burnout; disruptive student behavior; and student, administrator, and community apathy. Results indicate that teacher educators must search for new knowledge related to curriculum and instructional theories and develop an awareness and sensitivity for critical problems facing classroom teachers. Tables supply a list of theoretical statements on curriculum and instruction compared with observations of actual school setting practices. (JD)

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CURRICULUM AND INSTRUCTION: THEORY VERSUS PRACTICE IN SELECTED PUBLIC SCHOOL SETTINGS

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Curriculum and instructional changes are inevitable but before the type, degree and direction of changes are proposed -- the status of curriculum and instructional practices must be identified as to their relationships to theory. Is there a gap between theory -- what is known and practice, what is happening? What are the realities? What are the dilemmas? What are the critical incidents? What are the problems -- why do they exist -- how are they created? Can the problems be specifically identified and analyzed? What are the implications for change? Can theory be transposedinto more applicable guidelines that minimize day-by-day problems that exist in school settings -- the real world

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of physical education. Can professional preparation programs establish a better balance between theory and practice?

In attempting to find answers to these questions, data were obtained by observing 123 physical education classes (secondary N=72, junior high N=34 and elementary N=17) taught by 119 physical education specialists in 47 public schools in 6 states. An observational system was designed, refined and modified over a period of years to observe specific class functions: (1) Physical participation (engaged motor time); (2) Not involved (waiting time), (3) Teacher Talk; and, (4) Managerial (non-physical involvement and relocation). Data were analyzed for these functions by teaching modes; activities; teacher type; class type; school size; class size; school grade divisions; quality and quantity of practice trials; and, frequency, type and quality of instructional feedback.

In addition, a questionnaire was designed for personal interviews with teachers,administrators and students. Data were obtained specific to curriculum practices; school demographics; the duties,

responsibilities, problems and life styles of teachers; and, reactions of students and administrators to physical education.

The data were classified and organized my major and sub-elements for curriculum and instruction consisting of: (1) Objectives; (2) Content; (3) Teaching Modes; (4) Evaluation; (5) Teacher Interventions; (6) Curriculum Designs; (7) Curriculum Theories; and, (8) Instructional Theories. Theoretical statements and concpets were identified for the elements and comparatively analyzed with the school setting data. This analysis is shown in Figure 1.

In addition, the data obtained from the questionnaire and personal interviews were comparatively analyzed with theoretical statements and concepts identified for the data topics. This analysis is presented in Figure 2.

DISCUSSION

A comparative analysis of theoretical statements and school setting practices reveal that gaps do exist between theory and

practice for this selected school sample. There is evidence to indicate that:

1. The selection, organizing, managing and monitoring of effective student learning experiences are critical problems in school setting physical education program.
2. The student's learning experiences and achievements are the primary responsibilities of the physical education teacher.

However, other contiguous problems were identified that directly or indirectly influence curriculums, instruction, teacher effectiveness, teaching behaviors and student outcomes. These were: time and requirement contraints; socio-economic conditions; lack of administrative and community support; availability of facilities and equipment; teaching loads; inadequate preparation time; teacher-coach role conflicts; reward, satisfaction and reinforcement for teaching; interpersonal relations; the teacher's

image; teacher burnout; disruptive student behavior; and student administrator's and community apathy. These are problems that must be considered and resolved if change is to be affected.

What are the direction and change implications for the identified problems and types of variances that exist between theory and practice in curriculum and instruction?

There must be a concerted effort and commitment by Teacher Educators responsible for professional preparation programs to continue searching for new knowledge related to curriculum and instructional theories; to share this knowledge, permeated with the mutations of reality, with their students; to involve themselves with teachers and schools in cooperative projects, workshops and in-service training programs; and, develop an awareness and sensitivity for the critical problems that schools and teachers face in trying to function, educate and survive.

Physical education teachers also have a responsibility for minimizing and/or closing the theory-practice gaps. They must continue to grow professionally through graduate study and

participating in workshops, clinics and conferences. They must be knowledgeable and willing to adapt, modify and change their curriculum and instructional practices based upon the best available evidence. They must create positive program and teacher images by effective programs and instruction. They must attempt to minimize role conflicts and lack of job satisfaction by clearly delineating their roles in a school setting and perceive the different rewards for each role.

In conclusion, even though curriculum and instructional problems have been identified and recommendations for resolving them have been proposed, the author has a sense of joy and optimism. There are many professional preparation programs educating and training future teachers by concerned faculty involved in the search for truth. There are many dedicated and exciting teachers in school settings. There are excellent and innovative programs. There are children and youngsters being "turned on." There are many physical education teachers who are sensitive to the needs,

interests and expectations of students; who understand under what conditions students undertake to meet them; who are knowledgeable in the process by which students are involved in meeting them; who give students the best experiences for meeting them; who are aware of what sort of human being is best suited to assist students in meeting them; and, teachers -- who care.

SELECTED RESOURCES

AAHPERD. Youth Fitness Manual. Washington, D.C.: AAHPERD, 1980.

AAHPERD. Health Related Fitness Manual. Washington, D.C.: AAHPERD, 1981.

AAHPERD. Skill Test Series. Washington, D.C.: AAHPERD, 1978.

AAHPERD (Hellison, D., Ed., et al) Personalized Learning in Physical Education. Washington, D.C.: AAHPERD, 1976.

Adler, M. The Pardeia Proposal, New York, NY.: Macmillan Pub. Co., 1982, p. 33.

Anderson, W. G. & Barrette, G. T. What's Going On In Gym: Descriptive Studies of Physical Education Classes. Newton, CT.: Motor Skills Theory and Practice, Monograph 1, 1978.

Annarino, A. A. "Status of Curriculum and Instructional Practices in Physical Education," in progress, 1983.

Annarino, A. A. "Operational Taxonomy for Physical Education Objectives." JOPER. January, 1978, 54-55.

Annarino, A. A., Cowell, C. C. and Hazelton, H. Curriculum Theory and Design in Physical Education. St. Louis, MO.: C. V. Mosby Co., 1980, 85-186.

Annarino, A. A. "Another Way to Teach." JOPER, October, 1974, p. 43-45.

Bain, L. "Status of Curriculum Theory in Physical Education." JOPER. March 1978, p. 25-26.

Berliner, D.C. "Tempus Educare" Research on Teaching: Concepts, Findings and Implications. Berkeley, CA.: McCutchan, 1979.

Costello, J. and Laubach, S. "Student Behavior" What's Going On In Gym: A Descriptive Study of Physical Education Classes. (W. G. Anderson & G. T. Barrette, Editors). Newton, CT.: Motor Skills and Theory, Monograph, 1, 1978.

Earls, N. F. "Distinctive Teacher's Personal Qualities, Perceptions of Teacher Education and the Realities of Teaching." The Journal of Teaching in Physical Education. Fall, 1981, Vol. 1, No. 1, p. 59.

Flanders, N. A. Analyzing Teaching Behavior. Reading, MA.: Addison-Wesley Publishing Co., 1970.

Graham, G. and Heimerer, A. "Research on Teaching Effectiveness: A Summary with Implications for Teaching." Paper presented at AAHPERD Convention, Detroit, MI.: 1980.

Hough, J. B. and Duncan, J. K. Teaching: Description and Analysis. Reading, MA.: Addison-Wesley Publishing Co., 1970.

Imwold, C. H. & Johnson, D. J. "The Use of Evaluation in Public School Physical Education Programs." Journal of Teaching in Physical Education, Vol. 2, No. 1, Fall, 1982, p. 13.

Jewette, A. "The Status of Physical Education Curriculum Theory." Quest, Vol. 32, No. 2, 1980, pp. 163-173.

Jewett A. and Mullan M. Curriculum Design Purpose and Processes in Physical Education Teaching-Learning. Washington, D.C.: AAHPER, 1971.

Mancini, V. H., Doenges R. and Morris, H. H. The Use of Elementary Age Students as Modifiers of Physical Education Teacher Behavior. Paper presented at the MAHPER, Roxbury, MA.: 1978.

Mager, R. F. Preparing Instructional Objectives. Palo Alto, CA.: Fearon Publishers, 1962.

Massengale, J. "Researching Role Conflict." JOPER. Nov./Dec., 1981, p. 23.

Mosston, M. Teaching Physical Education. Columbus, OH.: Merrill Publishing Co., 1966, 1981.

Nixon, J. and Locke, L. "Research Teaching Physical Education." Second Handbook of Research in Teaching. Chicago, IL.: Rand McNally, 1973.

Rosenshine, B. "Content, Time and Direct Instruction." Research on Teaching Concepts: Findings and Implications. Berkeley, CA.: McCutchan, 1979.

Rupnow, A. "Pedagogical Methodology: Should The Teaching Style Issue be Resurrected?" Journal of Teaching in Physical Education. Vol. 2, No. 1, Fall 1982, p. 48.

Siedentop, D. Developing Teaching Skills in Physical Education. Boston, MA.: Houghton-Mifflin, 1983.

Siedentop, D., Birdwell, D. and Metzler, M. A. A Process Approach to Measuring Teacher Effectiveness in Physical Education. Paper presented at AAHPERD Convention, New Orleans, LA.: March 1979.

FIGURE 1.

ANALYSIS OF CURRICULUM, INSTRUCTIONAL THEORIES AND PRACTICES IN SCHOOL SETTINGS

THEORETICAL STATEMENTS	SCHOOL SETTING PRACTICES
OBJECTIVES	
Physical Education objectives, in a hierarchical form, are operationally defined and sequentially correlated with the growth and developmental stages of the learner.	One observes a lack of relationship between stated objectives, content, instruction and assessment.
There is general professional acceptance of the objectives and their opperational definitions.	There is a wide variability of philosophical agreement as to the relative importance of objectives -- their weighting, value and degree of program emphases.
Data-based information is available for the formulation of instructional, behavioral and performance objectives.	State curriculum guide plans have been developed that include performance objectives for all grade levels and activities.
Accountability is an educational concern.	Behavioral/performance objectives are not accepted as criterion references. They are difficult to use in traditional strategies and curriculum models.
CONTENT	
The selection, and scope of curriculum content should be highly related to student interests, needs, motives and expectations.	Curriculum content is determined primarily by facilities, equipment, supplies and teacher expertise.
	Societal changes are influencing curriculum content, e.g. aerobic dance, racquetball, jogging.
	There is not a variability of content due to geographical locations.
	The scope of curriculum offerings is limited to traditional team and individual activities. The introduction of new activities is limited by facilities, equipment, supplies and the teacher's knowledge.
	Community resources are available but not being used for the extended curriculum.
	Activities offered by all the school divisions are:

High School	
Basketball	Tennis
Flag football	Soccer
Volleyball	Softball
Archery	Weight training

Junior High	
Basketball	Soccer
Tumbling	Softball
Volleyball	Badminton

Elementary	
Fundamental Movements	Basketball
Stunts & Tumbling	Volleyball
Soccer	Ropes
Folk & Square	

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FIGURE 1. continued:
Valid and reliable tests are available for measuring the physical and psychomotor domains.

The AAHPERD Youth Fitness, District and Corporation designed tests are most frequently used.

Five schools used the AAHPERD Health Related Fitness Test. Teachers are not aware of it; are not knowledgeable in its administration; are limited by time; and, do not have the equipment to measure body composition.

Subjective estimates are influenced by "the Halo effect."

Seventy-eight percent of the teachers assess skill improvement, achievement and game-playing ability by subjective estimates.

The cognitive domain consists of two levels of cognition: knowledges and intellectual ability

Cognitive achievement is measured by low-level cognitive short-answer and recall teacher designed tests.

The Cognitive domain constitutes 30% to 50% of the total grade by 52% of the schools.

The predominant area of professional disagreement regarding appropriate bases for grading lies within the affective domain.

The affective grade is used primarily to minimize discipline problems and student motivation.

Formative evaluation should be used to provide immediate and continual feedback to the student.

Summative evaluation is the common practice. Formative evaluation techniques and purposes are not well-known.

Criterion-referenced measures tend to be more suitable for assessment of educational goals and insure some degree of accountability.

School or District developed norm-references are used for evaluation and grading.

Measurement and evaluation should be integral parts of the teaching-learning process.

The primary reason for assessment is to determine a grade required by school policies.

The most common grading scale is A, B, C, D.

The ideal conditions used in college/university testing settings are not relevant to school settings. (e.g. Elementary school: One teacher, 32 students, eight class periods per day, two times per week, 20 minute class modules.)

Time constraints, lack of teacher prep time for data analysis and feasibility of test administration are critical problems.

TEACHING MODES

A spectrum of teaching styles have been identified and categorized. Data-based information are not conclusive as to their affect on different types of student achievement.

Data were not obtained for teaching modes and their affect on the type, direction and degree of student outcomes.

The confounding of teaching modes is due to the proliferation of varying descriptive terms: self-check, inclusion, divergent, direct, cohort, indirect, inquiry, exploration, discovery, student-centered, teacher-centered, group-paced, self-paced, prescription, personalized, individualized, humanistic and ad infinitum.

Teaching styles observed:

Command	= 75%
Discovery	= 13%
Station-task	= 9%
Reciprocal	= 3%

Three classes used written task cards.

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FIGURE 1, continued:

Activity and fundamental sequencing should be related to the learner's developmental stages, progression and task analysis principles.	Learning tasks are too difficult too easy or repetitious. This results in student apathy, boredome and frustration that affects engaged motor time. Content progression and articulation are problems due to teacher's inability to teach advanced levels of skill and lack of an articulated Curriculum Guide Plan. The development of activity scope and sequence organizational charts is not a common practice.
The integration of cognitive concepts should be an integral component of the learning experience. The "Basic Stuff Series" is a collation of concepts and understandings extracted from physical education's Body of Knowledge.	Eighty-four percent (103) of the eachers interviewed were not aware of the "Basic Stuff Series." One teacher (elementary) directly taught sport concepts as part of curriculum content to third graders. Cognitive content consists primarily of rules, safety measures and courtesies presented by lecture and/or handouts.
Selection of appropriate content for its contribution to the physical domain is well established by physiological principles and effects.	The highest percentage of class exercise programs consist of low-intensity calisthenics (Mean time = 2.43 seconds). Aerobic-type activities are widely used, primarily for females, taught by female teachers. Basic exercise physiology and/or fitness types of mini-courses, with laboratory and lecture, were observed in five schools. One school had a required text.
Affective Content is defined in abstract terms -- difficult to measure.	A high relationship was found between high percentages of "waiting time" and negative student attitudes toward physical education. E.g. A high school of 2200+ students has a two year requirement. Thirty-two students are enrolled in the elective program? The observed classes produced a high percentage of waiting time. Affective content is used as the major criterion for determination of a grade.
EVALUATION	
A grade should reflect achievement and/or improvement of objective domains.	Affective criteria are used by 82% of the schools for determining 40% to 100% of the student's grade. Affective criteria are used by 20% of the schools for 1/0% of the grade. The types of affective criteria reported are: dress, tardy, absences, sportsmanship, attitude, social efficiency, improvement participation, effort, citizenship, leadership, locker room decorum and profanity. Grading in coed classes is a problem due to the variances in performance levels between boys and girls.

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FIGURE 1. continued:

Mean Percentages for male and female teachers for the function categories:

	M	F
Management	= 16%	18%
Waiting Time	= 36%	34%
Receiving Information	= 20%	19%
Engaged Motor Time	= 28%	29%

No significant differences between male and female teachers.

Mean Percentages for type of class (male, female, coed) for the function categories:

	M	F	C
Management	26%	29%	29%
Waiting Time	42%	33%	33%
Receiving Information	14%	18%	22%
Engaged Motor Time	18%	20%	16%

Significant differences in waiting time.

Descriptive research data related to teacher and student activities are consistent with slight variations.

Engaged motor-time percentages for activity groupings:

Team Activities	= 32%
Fundamental Activities	= 31%
Recreational Activities	= 25%
Developmental Activities	= 23%

The discovery style is used primarily in elementary classes.

It is difficult to compartmentalize teaching styles based upon clearly-defined criteria.

Group-paced and teacher-directed are the predominant styles.

The results of process-product, studies in other subject areas (Math and Reading) indicate that a direct instruction method produces higher rates of on-task and academic learning time. These factors are highly related to student achievement.

Student engaged motor-time percentages for teaching modes:

Station task	= 39%
Discovery	= 30%
Command	= 27%
Reciprocal	= 22%

Mean student waiting time (minutes) for teaching modes:

Reciprocal	= 32
Command	= 25
Discovery	= 22
Station task	= 16

TEACHER INTERVENTIONS

Well-designed systematic observational devices can objectively describe the degree, type of student class involvement and teacher interventions by function categories: management, waiting time, receiving information and engaged motor time.

Mean percentages by function categories for 123 observed classes:

Management	= 14%
Waiting time	= 34%
Receiving information	= 15%
Engaged motor time	= 29%

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FIGURE 1. continued:

If an observational system is used for teacher effectiveness evaluations, the data should be interpreted cooperatively by the teacher and observor for making value judgments and decision-making.	Rhythm and Dance Activities = 22% Individual and Dual Activities = 22% Engaged motor-time percentages for School divisions: Elementary = 36% Secondary = 28% Junior High = 24% Interpretations and conclusions from observational systems data should consider the nature, type and time frame of the observed activity; and, the objectives of the experiences.
If used as a research tool, definitive conclusions should be based upon an analysis of process and product data.	
The quality, quanity and nature of teacher interventions needs to be further investigated as to their specific affect on different types of students in a variety of environmental settings.	Example: A student had a total of 16 incorrect practice trials without a teacher intervention. A student had a total of seven practice trials. The student performed three practice trials incorrectly--the teacher intervened and provided instructional correctives--the student performed the same skill correctly four times. A student had a total of eleven practice trials. The teacher intervened after the fifth practice trials. The student performed two correct practice trials for the next six trials and four incorrectly.
CURRICULUM DESIGNS	
The complexity of motor skill or task must be analyzed as to the number of component parts of the task and its information processing demands.	The most common curriculum design is the single block plan with equal time blocks allocated to units. The complexity of the activity and individual learning rates are not considered. e.g. Golf unit -- three weeks; Table tennis unit -- three weeks.
Elective programs are possible with many organizational patterns that provide selections and choices for the students.	Student selection and choice programs are offered primarily in large school corporations as elective program. However, in most cases, the organizational pattern is the single block plan with four-six week time blocks. Two schools offered 18 week time blocks.

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TOTAL SAMPLE

GRADE DIVISION	SCHOOLS	CLASSES	STUDENT	TEACHERS
Elementary	7	17	409	9
Jr.-Middle	15	34	952	32
High School	25	72	1872	72
N =	47	123	3232	113

CLASS TYPE		TEACHER TYPE		GRADES OBSERVED		
Female	= 22	Female	= 55	K = 1	5 = 2	9 = 20
Male	= 26	Male	= 68	1 = 2	6 = 2	10 = 41
Coed	= 75		123	2 = 0	7 = 16	11 = 10
	123			3 = 5	8 = 18	12 = 1
				4 = 5		

CLASSES BY SCHOOL ENROLLMENTS

1200+ = 55

601 - 1199 = 45

0 - 600 = 23

ACTIVITIES OBSERVED

Team	= 28	Recreational	= 6
Individual and Dual	= 45	Rhythm and Dance	= 11
Developmental	= 21	Fundamental Movement	= 11

		ELEMENTARY			JR.-MIDDLE			HIGH SCHOOL		
	STATES	SCH.	CL.	TEACHERS	SCH.	CL.	TEACHERS	SCH.	CL.	TEACHERS
1.	CA	1	3	1	0	0	0	5	15	15
2.	FL	0	0	0	3	9	9	4	12	12
3.	IN	2	3	2	8	17	17	11	32	32
4.	OH	2	5	2	1	2	2	2	5	5
5.	PA	1	3	3	2	4	4	2	5	5
6.	WV	1	3	1	1	2	2	1	3	3
	N =	7	17	9	15	34	32	25	72	72

FIGURE 2. ANALYSIS OF STATEMENTS AND DATA FROM QUESTIONNAIRE AND INTERVIEWS

Theoretical Statements	School Practices
CURRICULUM PLANNING	
The Physical Education Curriculum consists of selected and sequentially planned learning experiences that provide opportunities for students to achieve objectives.	Written Curriculum Guide Plans were only available in N=28 of the schools. Only N=8 of the available plans were sequenced from grades K-12. Typical curriculum planning consists of a yearly scheduling of activities. There is a lack of communication and articulation in planning between different school divisions in the same community.
The implementation of a competency-based criterion-referenced curriculum requires curriculum models and instructional strategies that manipulate the time variable for student learning.	Competency-Based Curriculum Guide Plans have been developed by three state departments. Teachers were not trained or willing to change their teaching behaviors, curriculum models and/or instructional strategies for effective implementation.
PHYSICAL EDUCATION REQUIREMENTS AND EXTENDED PROGRAMS	
Young people need physical exercise for their health's sake and also as an outlet for their abundant energy. Twelve years of physical education and participation in various intramural sports and athletic exercises are proposed to fill this need.	There were wide variances in state and school requirements. Requirement ranges: Grades 1 - 6: 10% of day; 7 - 8: 15% of day; 9 -12: one year, one credit to Grades 1 -12: daily period equal in length to other school subject. States, schools and teachers are constantly involved in defending and justifying existing requirements. The loss and erosion of requirements, at all school levels are increasing. The average class sizes were. High School N=26 Junior High N=28 Elementary N=24 Due to decreasing enrollments, required class sizes are decreasing and elective class sizes are increasing. The average (minutes) class time modules were: High School N=53 Junior High N=51 Elementary N=31

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FIGURE 2. (continued)

Intramural programs were offered by:

High School N=11
Junior High N=1
Elementary N= 2

Reasons cited for lack of program:

a. Student apathy
b. Lack of funds and supervision
c. Lack of facilities due to the expansion of athletic programs
d. Consolidation of schools in rural areas and busing

A typical intramural program is an unorganized, supervised noon-hour free play period.

Every handicapped youngster must be provided with physical education services by participating in a regular physical education program (mainstreaming) unless the youngster is enrolled in a separate facility or needs specially designed instruction.

Special children were mainstreamed in 41 of the schools.

Special physical education taught by specialists were offered in 6 schools.

The development and use of an IEP (Individualized Education Program) is not a common practice.

Eighty-six percent of the physical education teachers indicated that they were not adequately prepared to provide for the needs of special children and youth in their regular classes. The common practice is for special children and youth to be used as officials, scores and participate on a very limited basis.

PHYSICAL EDUCATION TEACHER'S DUTIES AND RESPONSIBILITIES

There are affectors and effectors that can directly or indirectly influence curriculum, instruction, teaching effectiveness, teaching behaviors and student outcomes.

Teaching responsibilities included: Physical education, Health, First Aid, CPR, Driver Education and other subject areas (Social studies, Biology and Industrial Arts).

Other Duties included: Coaching; departmental chair; athletic director; supervision of cafeteria, hallways, locker rooms, study halls, free play and laundry rooms; counselling; equipment manager; athletic trainer; intramural director; facility coordinator; evening adult classes and groundskeeper.

The uniqueness of the teacher/coach role and the expectations of the school and community place the teacher/coach in unavoidable conflict situations.

Coaching responsibilities included:

One sport N=12
Two sports N=82
Three sports N= 7

Twelve teachers had resigned their coaching positions and were selling real estate, athletic equipment and insurance to supplement their incomes.

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FIGURE 2. (continued)

Forty-two percent of the female athletic teams were coached by males, primarily in the junior high school.

Due to an older tenured faculty, administrators are having difficulty in securing competent and qualified faculty to coach, particularly for female teams. These are usually filled by part-time university students or community personnel.

Job, personal stress and teacher burnout are critical problems that are increasing in magnitude and frequency.

A typical Case Study:
The subject was a junior high school physical education -- health teacher and coach. She was in her sixth year of teaching and studying for a Master's degree. She was a divorcee, age 34, with two children -- ages 7 and 10. Her daily schedule was:

6:00 a.m.	Arises, prepares breakfast for and dresses children.
7:40	Drives children to school.
7:55	Arrives at school.
8:00 - 8:15	Planning time
8:20 -11:10	Teaches three fifty-minute physical education classes.
11:20 -12:10	Lunch - supervises the lunchroom.
12:20- 3:10	Teaches two physical education classes and one health class.
3:25- 5:00	Coaches - eighth grade girls basketball in winter, track and field in Spring.
5:20 p.m.	Leaves school.
5:30	Picks up the children.
6:00	Prepares dinner.
7:30	Helps children with their homework.
8:30	Children bedded.
7:30 p.m.	Basketball game every Tuesday night - track meets in the Spring.

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FIGURE 2. (continued)

TEACHER'S INTERVIEW PERCEPTIONS AND COMMENTS

There are factors that must be resolved so that the teacher can "Teach." Factors, such as, Socio-economic conditions, administrative and community support, teacher load, time and requirement constraints, preparation and planning time, teaching reward and satisfaction, teacher's image and interpersonal relationships, student disruptive behavior and student apathy.

They derived very little satisfaction and reward from teaching. Community and administrator's praise and reinforcement are for coaching. This creates a teacher-role conflict.

Lack of preparation time affected class planning, preparation of instructional materials, curriculum changes and implementating a comprehensive testing program.

Their professional preparation was too theory-oriented. There must be a closer match between theory and practice. College/university faculty are not aware and sensitive to the realistic problems that exist in school settings.

They spent more time coping with discipline problems and disruptive behavior than teaching.

STUDENTS' INTERVIEW PERCEPTIONS AND COMMENTS

Teacher effectiveness is highly related to a warm, positive, well-planned learning environment that provides a degree of student choices.

Negative reactions expressed by students were: we played the same games over and over; the class is boring; the teacher is lazy; the teacher never smiles; the teacher never made me feel good; and, winning is always too important.

Positive reactions were: be able to choose activities; having fun; playing new games; the teacher laughed and had fun with us; the teacher took an interest in me; and, we have fun.

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*FUNCTION CATEGORIES AND PROCEDURES FOR DEVELOPING

THE EXTENT AND QUALITY OF STUDENT-TEACHERS

INTERACTIONS IN PHYSICAL EDUCATION CLASSES

I. Categories

A. Physical Participation (P.P.):
   1. Active and direct physical involvement
      a. Practicing a motor skill
      b. Game or sport skill contact
      c. Performing exercises

B. Not Involved (N.I.):
   1. Not physically active
      a. Awaiting turn in practice drills or game
      b. Not directly physically engaged in a game, sport and/or exercise activities
      c. Not receiving or giving information

C. Teacher Talk (T.T.):
   1. Teacher demonstration and explanation
   2. Organizational instructions
   3. Instructional feedback
   4. Student not physically active

D. Non-Physical Involvement (N-P.P.):
   1. Seeks information by questions
   2. Spotting
   3. Communicates with other students relative to practice or game activities
   4. Listening to class information

E. Relocation (R.):
   1. Organizational movement for exercises, practice and game activities
   2. Movement to activity areas
   3. Retreiving balls, etc.
   4. Obtaining and setting-up equipment

F. Teaching Styles (T.S.):
   1. Mosston's spectrum
      a. Command
      b. Task
      c. Reciprocal
      d. Small group
      e. Individualized
      f. Guided Discovery
      g. Problem Solving

G. Trials (T.):
   1. Performance of motor tasks either in a practice or game setting
   2. Quality and quanity of trials:
      1 = correct performance
      - = incorrect performance
      + = trial with individual teacher corrective

*Modified from: Anderson, William, Analysis of Teaching Physical Education. St. Louis, Mo.:, C. V. Mosby Co., 1980, p. 24.

II. Coding Procedures

A. Target student: average participant determined by teacher.

B. Coding starting point: following roll call or start of activity program.

C. Coding: code student's participation for 3 minutes by placing a check in the appropriate category every 5 second interval. For the next 3 minutes code only the student's trials category. Repeat coding procedure until class is terminated.

D. Teaching Mode: indicate the teaching mode used during every 3 minute interval--command, task, reciprocal, small group, guided discovery, problem solving and individualized.

E. Notations: note specific observational events occurring the 3 minute intervals.

F. Analysis: total the checks in each column and calculate the time and percentage of time for each category.

G. Summary: indicate conclusions and evaluative comments.

School [illegible] Enrollment ____ Grade 9 Activity Badminton

Class Size 45 Type Coed Teacher M Time Module 45

Time: Dress 4:00 Roll 1:55 Conditioning 6:06 Activity Bad. Skills Shower 6:15

P.P.	N.I.	T.T.	N-P. P.	R.	T.S.	TRIALS	OBSERVATIONS
32	1	3			C	21	conditioning
					C	10	"
	12	18		6	C		Rules explaination verbal
					P.S.	11 + + + 11 + 1 + + 11	Badminton game practice
20	6	6		4	P.S.	11 + 1 1111 — — 11	Three courts - doubles total 12 students
					P.S.		
3	28			5	P.S.	111	Rotated out - spectator
					P.S.		
	30				P.S.		spectator
					P.S		
	30	6			P.S.		spectator
					P.S.		
8:40	17:26	5:04		2:29		T = exercise 25 T = Badminton	
55 = 25.5	113 = 52.3	33 = 15.3		15 = 6.9		+ = 7 — = 2 / = 19 T = 28	

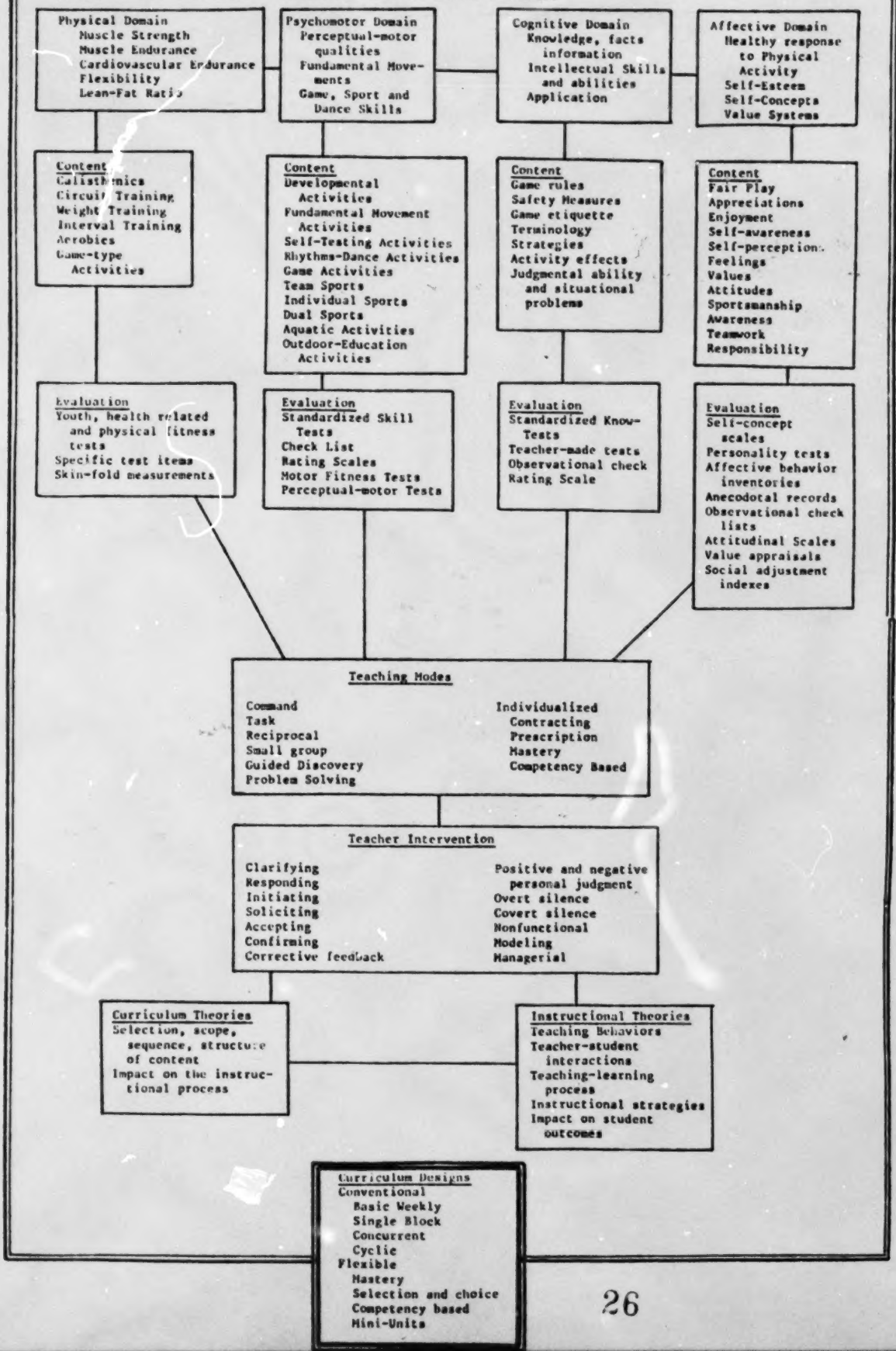
Comments: Three courts - 45 students - 12 students participating and rotating

Objective: Practice skills previously instructed

24

25

FIGURE 1. PHYSICAL EDUCATION CURRICULUM AND INSTRUCTIONAL ELEMENTS.



Recommendations

Objectives

1. That professional preparation faculty and school physical educators reexamine and evaluate physical education objectives as to focus, direction and emphasis based upon the question -- What are our unique contributions to both quality of life?

2. That curriculum and instructional practices, at all levels, reflect the results of this examination.

3. That due to the low levels of fitness performance scores -- the physical fitness objective be emphasized by devoting a minimum of 8-10 minutes in every class period to progressive, high intensity conditioning activities.

Content

1. That the selection and sequencing of activities and their fundamentals be determined by the learner's developmental stages, interests and needs; societal influences; and; objectives.

2. That skills be task analyzed as to their degree of difficulty and correlated with the developmental and readiness characteristics of the learner.

3. That units/and or courses in basic exercise physiology.

Evaluation

1. That a grade be based upon achievement/and or improvement for the objectives that represent the basic program content.

2. That minimal criterion references be identified and used for achievement standards. If they are used -- curricular models and instructional strategies must be modified in order to manipulate the learning time variable.

3. That two sets of criteria standards be established for males and females for evaluation where feasible. If ability grouping is used -- different standards would apply for each group.

4. That formative evaluation techniques should be used to monitor progress and provide feedback to the student and teacher.

5. That cognitive tests should include "Basic Stuff" content and designed to measure reasoning ability.

6. That recall low-level cognitive knowledge can be achieved by reading, homework assignments and adopting a textbook.

7. That Teacher Educators in an institution must -- philosophically agree as to objectives and their relative values.

8. That there are valid, reliable, and feasible measuring devices for determining skill and fitness status.

9. That physical education teachers justify and negotiate for time to measure and evaluate.

Teaching Modes

1. That an effective instructional strategy involves simple written task cards with specific activity status and stations with correlated activities.

2. That instruction to be effective should be structured so that students move through appropriate sequenced tasks.

3. That in planning and instruction -- the teacher should be constantly aware of the qualitative and quantitative amount of time that the student is devoting and engaged in learning time.

4. That a teaching mode that produces greater amounts of learning time and manipulates the time variable for learning is effective.

5. That the selection of a teaching mode is primarily determined by the objectives to be achieved.

6. That the development of an instructional strategy should:

   a. Specify the objectives to be achieved.
   b. Select the appropriate tasks for the objectives.
   c. Select the most effective teaching mode.
   d. Disclose to the students what they are specifically to achieve, how to achieve, the criterion for achievement and how they will be evaluated.

Teacher Interventions

1. That teachers be cognizant of managerial skills and their relationships to productive learning time and effective instruction.

2. That the nature of the teaching-learning climate is determined by primarily the teacher's characteristics and behaviors.

3. That the number and type of teacher interventions -- corrective feedback and reinforcement -- during practice trials can minimize incorrect repetitions.

Curriculum Designs

1. That the selection and sequencing of activity content is determined by the developmental stages, interests and needs of students.

2. That the amount of curriculum time allocated to an activity should be based upon the nature and complexity of the skills involved.

3. That curriculum models should provide:

   a. Student selection and choice.
   b. Implementation of instructional strategies that permit individual rates of learning.